

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

TYCO FIRE PRODUCTS LP d/b/a TYCO	:	CIVIL ACTION
FIRE SUPPRESSION & BUILDING	:	
PRODUCTS	:	
Plaintiff,	:	
v.	:	
	:	
THE RELIABLE AUTOMATIC	:	No. 10-3446
SPRINKLER CO., INC.	:	
Defendant	:	

MEMORANDUM ON CLAIM CONSTRUCTION

Baylson, J.

May 16, 2011

I. Introduction

On July 13, 2010, Plaintiffs Tyco Fire Products LP (“Tyco”) filed a declaratory judgment action against The Reliable Automatic Sprinkler Co., Inc. (“Reliable”). Reliable holds U.S. Pat. No. 6,446,732 entitled “VELO ECOH sprinkler arrangement” (“the ‘732 patent”), a fire protection sprinkler system. See Pl.’s Opening, Ex. 1. Tyco seeks determinations that Tyco’s Model EC-17 Area Density sprinkler does not infringe upon the ‘732 patent and that the claims of the ‘732 patent are invalid. Reliable has countersued for infringement.

Presently before this Court are the parties’ briefs on claim construction pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir.1995) (en banc), aff’d 517 U.S. 370 (1996). On March 28, 2011, the Court held argument on claim construction.

II. Legal Standards

Claim construction is a matter of law. Markman, 517 U.S. at 372. Claim terms are “generally given their ordinary and customary meaning” from the perspective of “a person of

ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

In some instances, the ordinary and customary meaning “as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of the commonly understood words.” *Id.* at 1314. A district court is not obligated to construe terms with ordinary meanings, lest trial courts be inundated with requests to parse the meaning of every word in the asserted claims. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1360–62 (Fed. Cir. 2008)

If a term’s meaning is not readily apparent, the court may discern the meaning from a variety of sources, such as “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.”” *Phillips*, 415 F.3d at 1314 (citing *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). Claim terms are not construed “in a vacuum [but] in the context of the written description and the prosecution history.” *Id.* at 1313 (quoting *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005)).

The meaning of a claim term begins with the intrinsic evidence: the claim language, the specification, and the prosecution history. The context in which the term is used within the claim may offer significant guidance, “provid[ing] a firm basis for construing the term.” *Id.* at 1314. Term usage in one claim will also typically illuminate the meaning of the same term used in another claim. *Id.*

As claims are part of a larger fully integrated document, they must also be “read in view of the specification.” Id. at 1315 (quoting Markman, 52 F.3d at 979). The specification is “highly relevant” and “usually . . . dispositive” of a term’s meaning. Id. at 1315–16 (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Thus, if the specification reveals a “special definition” that differs from the meaning a claim term would otherwise possess, “the inventor’s lexicography governs.” Id. at 1316. While less useful than the specification for claim construction, the prosecution history may additionally assist in identifying how the inventor perceived the invention and whether the inventor narrowed the scope of the claims at any point. Id. at 1317.

Courts may also rely on evidence which is “external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” Id. at 1317 (quoting Markman, 52 F.3d at 980). Such extrinsic evidence is most reliable when considered in the context of the intrinsic evidence. Id. The Federal Circuit has instructed that courts may consult “general purpose dictionaries” where claims do “not require elaborate interpretation.” Id. (quoting Brown v. 3M, 265 F.3d 1349 (Fed. Cir. 2001)).

III. Discussion

The ‘732 patent relates to a “fire protection sprinkler arrangement” aimed at achieving “improved uniformity of distribution of water for extended coverage.” ‘732 patent at col. 1, ll. 1-2, 64-65; Pl.’s Ex. 1. The patent attains this objective, in part, through the use of a “deflector supported in spaced relation to axial passage” through which water is delivered. Id. at col. 2, ll. 4-10; see also id. at Fig. 1, no. 46; Fig. 3, no. 50. The deflector is described in Claim 1 as “having a central region and a peripheral region surrounding the central region which is bent toward the sprinkler body along a circular bend line[.]” Id. at col. 5, ll. 16-18 (emphasis added).

The parties are only in dispute about one claim term, “bent,” as applied the deflector. Id. at col. 2, ll. 9-10.

A. The Parties’ Contentions

Tyco proposes construing the term to mean “inclined at a single angle that is greater than a slight angle, i.e., is greater than 20 degrees.” Tyco avers that the patent’s specification consistently characterizes the deflector as “bent,” Pl.’s Opening at 4 (citing '732 patent, col. 2, l. 10, col. 3, ll. 37-47, col. 4. l. 27), and each of the disclosed embodiments of the deflector are of a single angle between 30 and 40 degrees. Pl.’s Opening at 4 (citing ‘732 Patent at col. 3, ll. 44-47). Tyco avers further that the patent describes another deflector from prior art U.S. Patent 5,609,211 (“the ‘211 patent”) as “bent” and that patent discloses a deflector at a single angle of greater than 20 degrees. Pl.’s Opening at 4-5 (citing ‘732 patent, col. 1, ll. 44-50; ‘211 patent, Pl.’s Opening, Ex. 4, Fig. 3).

Tyco avers that, in contrast, deflectors angled less than 20 degrees or having multiple angles are not described in the ‘732 patent as “bent.” Tyco points to the descriptions of prior art U.S. Patent No. 5,366,022 (“the ‘022 patent”) and U.S. Patent No. 5,579,846 (“the ‘846 patent”), referring to deflectors of less than 20 degrees as “flat or slightly angled.” Id. (citing '732 patent, col. 1, ll. 39-43). Tyco also cites the description of U.S. Patent 5,862,944 (“the ‘944 patent”), a deflector of multiple angles, as “having inner surfaces inclined at different angles,” omitting any reference to “bent.” Id. (citing '732 patent, col. 1, ll. 50-57). Tyco argues that the difference between the language used to describe deflectors in the prior art versus the description of the deflector in the ‘732 patent reveals that Reliable has “acted as his own lexicographer” and afforded the term “bent” a meaning unique to the patent. Id. at 6-7.

Reliable responds that neither the ‘732 patent nor the prosecution history evince an intent to limit the invention or the meaning of the term “bent” to a single angle or specific range of angles. Id. at 11. Reliable contends the embodiments of the ‘732 patent that attribute to the deflector a particular range of angles are only preferred embodiments. Id. Further, Reliable avers that the ‘732 patent uses a variant of “bent” – “bending” – in reference to angles as small as 5 degrees. Id. (citing ‘732 patent at col. 3, l. 66 to col. 4, l. 14). Reliable further responds that, while the preferred embodiment includes a deflector bent at a single angle, nothing in the patent or prosecution history supports such a limitation. Id. at 12.

Reliable contends that the term “bent” need not be construed because it is neither a term of art nor a technical term, but rather a word “commonly understood” by a lay person and used in the patent in its “plain and ordinary sense.” Def.’s Opening at 9. According to Reliable, nothing in the patent or file history indicates intent to give “bent” a “special or different meaning.” Id. at 9-10.

In the alternative, Reliable submits that the word should be construed to have “its ordinary and customary meaning” of “not straight or flat, crooked.” Id. at 10. Reliable avers that the ‘732 patent uses the term “bent” and variants of “bent” consistently to mean “not flat.” Def.’s Opening at 11. Reliable avers that the patent and prosecution history distinguish the “bent” deflector of the ‘732 patent from “conventional flat deflectors” or deflectors with “planar configuration” of prior art. Id. (citing ‘732 patent at col. 4, ll. 58-62; ‘732 File History, November 5, 2001 Amendment at 3-4, Nosher Decl.; Ex. 5).

Tyco replies that (1) while the ‘732 patent differentiates “bent” from “flat” or “planar” deflectors, the patent similarly differentiates “bent” from slight and multiple angled deflectors; (2) Tyco’s construction has not limited the invention to preferred embodiment because it is

inclusive of angles as low as 21 degrees; and (3) Reliable's use of the variant "bending" does not refer to the same type of angled deflector, but, rather, the "downward position of the [deflector] tine edges." Pl.'s Resp. at 2-4.

B. Analysis

Tyco's Proposed Construction

"inclined at a single angle that is greater than a slight angle, i.e., is greater than 20 degrees."

Reliable's Proposed Construction

No construction necessary.

If construed: "not flat, crooked"

"To be his own lexicographer, a patentee must use a 'special definition of the term [that] is clearly stated in the patent specification or file history.'" Laryngeal Mask Co. Ltd. v. Ambu, 618 F.3d 1367, 1372 (Fed. Cir. 2010) (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1580 (Fed. Cir. 1996)). While a claim term may be redefined in a specification "by implication," Bell Atlantic Network Services, Inc. v. COVAD Comm. Group, Inc., 262 F.3d 1258, 1268 (Fed. Cir. 2001), this is generally warranted when a patentee has used the claim term "throughout the written description in a manner consistent with an unconventional meaning." Honeywell Intern., Inc. v. Universal Avionics Systems Corp., 493 F.3d 1358, 1367 (Fed. Cir. 2007) (emphasis added) (citing Bell Atlantic, 262 F.3d at 1273).

Tyco provides no evidence of the patentee's clear intent to provide a "special definition" of the term "bent." Tyco can only point to the omission of the term "bent" from descriptions of prior art with deflectors at lesser inclines than in the '732 patent or deflectors of multiple angles. As Reliable points out in its response brief, four of the five figures from the '022 and the '846 patents show these prior art deflectors as "being completely flat" and, thus, the patentee had no reason to describe this prior art as "bent." Def.'s Resp. at 4, see Pl.'s Ex. 5, Fig. 1-5; Ex. 6, Fig.

1-5. Further, the more specific description of the ‘994 patent deflector, noting its multiple angles, in no way demonstrates the patentee’s intent to limit the more general term “bent” as applied to the claims of the ‘732 patent deflector. Finally, the use of the variant “bending” in the ‘732 patent to describe the downward position the deflector tines, which have angles as small as 5 degrees, runs counter to the notion that the patentee gave the related term “bent” a special or unconventional definition.

In Laryngeal Mask Co. Ltd., the Federal Circuit counsels against adding a limitation to the claims "where none appears." Id. at 1371. The Court finds Tyco’s proposed construction to impose limitations not present or able to be implied from the claim language. First, Plaintiff has not provided support to imply from the term "bent" a limitation to a "single angle." Second, support for limiting the term scope to greater than 20 degrees comes only from the embodiments. As the Federal Circuit explained in Phillips, “although the specification often describes very specific embodiments of the invention, [the court] ha[s] repeatedly warned against confining the claims to those embodiments.” 415 F.3d at 1323. Tyco’s argument that its proposed construction exceeds the scope of the embodiments by including angles as small as 21 degrees fails because the limitation to 21 degrees itself is arbitrary.

Tyco has not provided evidence that (1) the patentee acted as his own lexicographer to provide the term “bent” with a meaning unique to the patent or (2) someone of ordinary skill in the art would interpret the term “bent” differently than would an educated lay person. Thus, Tyco cannot overcome the presumption in favor of giving the claim term its ordinary and customary meaning. See Schoenhaus v. Genesco, Inc., 440 F.3d 1354, 1358 (Fed. Cir. 2006).

Further, the use of the variant “bending” to describe different types of, and smaller, angles than the deflector, and the differentiation in the patent and prior art between “bent” and “flat” deflectors, also support construing consistently with its plain meaning.

The Court concludes that “bent” is a non-technical term that a lay-person would understand and for which a general purpose dictionary is helpful. Phillips, 415 F.3d at 1314. Reliable’s proposed construction is “not straight or flat; crooked,” drawn from the dictionary definition “not straight, crooked.” See Webster’s II New College Dictionary (1995); Def.’s Opening, Ex. 3. Other dictionary definitions imply that a “bent” item needs to have been “made bent.” See The American Heritage Dictionary of the English Language 196 (4th ed. 2009) (defining “bent” as “altered from an originally straight or even condition”) (emphasis added); Merriam-Webster’s Collegiate Dictionary 114 (11th ed. 2005) (defining “bent” as “changed by bending out of an originally straight or even condition”) (emphasis added); see also Webster’s New World Dictionary (3rd Ed. 1988); Def.’s Opening, Ex. 4 (defining “bent as “made curved or crooked, not straight”). The Court finds these definitions more consistent with the purposeful bend intended for the deflector in the ‘732 patent. See e.g., ‘732 patent at col. 5, ll. 16-18 (“bent toward the sprinkler body along a circular bend line”). Therefore, this Court will construe “bent” to mean “altered from an originally straight or even condition.”

IV. Conclusion

The Court will construe the terms in the ‘732 patent consistent with the above analysis. An appropriate order follows.